

POSPELOV, V.

Transliteration of geographic names as related to the publication
of "Rules of Russian orthography and punctuation," Geod. i kart.
no. 5:50-52 My '57. (MLRA 10:8)
(Names, Geographical)

POSPELOV, Ye.M. (Moskva); KAPLUN, M.M. (Moskva)

Journeys of a scientist ("From the Arctic to the tropics" by D.I.
Shcherbakov [akademik]. Reviewed by E.N.Pospelov, M.M.Kaplun).
(MIRA 14:6)
Priroda 50 no.7:121-122 J1 '61.
(Voyages and travels)
(Shcherbakov, D.I.)

POSPELOV, Ye.M.

Present state of the transcription of geographical names on the
international map of the world on the millionth scale. Sbor. st.
po kart. no. 11:7-11 '60. (MIRA 14:1)
(World maps) (Names, Geographical) (Transliteration)

POSPELOV, Ye.M.

Transcription of geographical names in Czechoslovakia and Poland.
Sbor. st. po kart. no. 11;13-18 '60. (MIRA 14:1)
(Czechoslovakia--Names, Geographical)
(Poland--Names, Geographical}
(Transliteration)

POSPELOV, Ye.M.

Place of toponymy in geographical education. Izv. Vses. geog. ob-sh
96 no.4:337-340 Jr.-Ag '64. (MIRA 17-10)

POSPELOV, Yu.

Problems of the standardization by branches in the draft of State
Standard 1-65. Standartizatsiya 29 no.8:48-49 '65.
(MIRA 18:10)

POSPEROV, YU A.

USSR/Engineering - Instruments

Card 1/1 : Pub. 12 - 8/16

Authors : Pospelov, Yu. A.

Title : Fuel consumption indicator, type INKh

Periodical : Avt. trakt. prom. 7, 29-30, July 1954

Abstract : A description is presented of a newly designed fuel consumption indicator for automobiles. The instrument gives 97 to 99% accurate readings. Diagrams and illustrations depicting the operation, structure and installation of the above component, are given.

Institution :

Submitted :

L 11131-65 EWT(m)/EWP(t)/EWP(b) IJP(c)/ESD(gs)/ESD(t) JD

ACCESSION NR: AP4048389

S/0181/64/006/011/3206/3216

AUTHORS: Pospelov, Yu. A., Kechin, V. V.

B

TITLE: Concerning the analysis of galvanomagnetic characteristics
of bismuth-type metals

SOURCE: Fizika tverdogo tela, v. 6, no. 11, 1964, 3206-3216

TOPIC TAGS: galvanomagnetic effect, kinetic equation, Fermi surface

ABSTRACT: In view of the information that can be gained from galvanomagnetic measurements on the relaxation processes in metals, the authors propose a new method for analyzing the galvanomagnetic characteristics of metals of the bismuth type. The method is based on separating the galvanomagnetic characteristics that depend only on the "electronic" part of the Fermi surface, which is assumed to have a three-ellipsoid configuration, with no special assumptions made concerning the "hole" surface, other than the symmetry properties

Card 1/2

L 14431-65

ACCESSION NR: AP4048389

3

which follow from this surface from the analysis of A. A. Abrikosov and L. A. Fal'kovskiy (ZhETF v. 44, 1935, 1963). The Boltzmann equation is solved in the τ -approximation and five formulas are derived for galvanomagnetic coefficients, from which the parameters of the "electronic" Fermi surface are evaluated. "The authors thank R. G. Arkhipov and A. I. Likhter for a useful discussion." Orig. art. has: 5 figures and 39 formulas.

ASSOCIATION: Institut fiziki vy*sokikh davleniy AN SSSR, Moscow
(Institute of High-Pressure Physics AN SSSR)

SUBMITTED: 07Apr64

ENCL: 00

SUB CODE: EM, MM

NR REF SOV: 002

OTHER: 007

Card 2/2

L 1572-66 EWT(1)/EWT(m)/EWP(t)/EWP(b) IJP(c) JD

ACCESSION NR: AP5019214

44, 65

44, 55

UR/0056/65/049/001/0036/0046

54
B

AUTHOR: Kechin, V. V.; Likhter, A. I.; Pospelov, Yu. A.

44, 55

TITLE: Dependence of the galvanomagnetic effects in Sb on the temperature and the pressure

21, 44, 55

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 49, no. 1, 1965,
36-46

TOPIC TAGS: antimony, ⁴¹galvanomagnetic effect, Hall constant, specific resistance, magnetoresistance, crystal lattice structure, pressure effect

ABSTRACT: To determine the variation of the energy spectrum of antimony, accompanying a gradual reduction of the crystal parameter ratio c/a and of the corner angle difference $60^\circ - \alpha$ under high hydrostatic pressure, the authors investigated the pressure dependence of certain galvanomagnetic coefficients at room temperature. The coefficients studied were the two resistivity components, the two Hall coefficients, and the eight magnetoresistance components, which were measured at pressures up to 10,000 atm. The apparatus employed was described earlier (FTT v. 5, 3066, 1963). The preparation and the installation of the samples are described. Measurements were also made of the temperature dependence of these coefficients at 293, 273, 195, and 77K under atmospheric pressure. The results show that the num-

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L 1572-66

ACCESSION NR: AP5019214

3

ber of carriers is independent of the temperature (T), but the mobility is proportional to T^{-p} ($p = 1.3--1.4$). The deformation of the electronic Fermi surface by the pressure is calculated. The carrier density is shown to decrease under pressure. The effective mass anisotropy increases with the increasing pressure, but the tilt of the electronic ellipsoids is decreased by about 7° at 10,000 atm. Orig. art. has: 7 figures, 7 formulas, and 3 tables.

ASSOCIATION: Institut fiziki vysokikh davleniy Akademii nauk SSSR (Institute of High-pressure Physics, Academy of Sciences, SSSR) 44,55

SUBMITTED: 27Jan65

ENCL: 00

SUB CODE: SS, EM

NR REF Sov: 008

OTHER: 009

Card 2/2

POSPELOV, Yu. A.

POSPELOV, Yu. A.: "Investigation of the thermal economy of trucks and methods of operating their engines on mountain forest roads". Moscow, 1955. Min Higher Education USSR. Moscow Forestry Engineering Inst. (Dissertations for the Degree of Candidate of Technical Sciences)

SO: Knizhnaya letopis', No. 52, 24 December, 1955. Moscow.

Rec E&UER

ACCESSION NR: AP4034938

S/0181/64/006/005/1525/1527

AUTHOR: Pospelov, Yu. A.

TITLE: The temperature dependence of the electrical conductivity along the trigonal axis of graphite

SOURCE: Fizika tverdogo tela, v. 6, no. 5, 1964, 1525-1527

TOPIC TAGS: temperature dependence, electric conductivity, graphite, electron spectrum

ABSTRACT: It has been found that the electrical conductivity of graphite along the trigonal axis falls at first on increase in temperature, reaches a minimum at about 200K, and then increases. This anomalous behavior of electrical conductivity has been investigated. Using the model of I. S. Slonczewski and P. R. Weiss (Phys. Rev., 109, 272, 1958) for the electron spectrum of graphite, the author obtained an expression for the electron conductivity along the trigonal axis:

$$\sigma_{xx} = \frac{e^2 c_0 \gamma_1 \tau_0(T)}{9\pi^2 a_0^2 h^2 \tau_0^2} \int_0^{\pi} \Phi(\varphi) [\pi^2 (kT)^2 + 12\gamma_2^2 (3\cos^2 \varphi - 1/3)^2] d\varphi,$$

where

$$\Phi(\varphi) = \sin \varphi \operatorname{tg} \varphi f(\varphi),$$

Card 1/2

ACCESSION NR: AP4004867

S/0181/63/005/012/3574/3579

AUTHORS: Pospelov, Yu. A.; Kechin, V. V.

TITLE: Magnetic field dependence of electrical resistance in graphite

SOURCE: Fizika tverdogo tela, v. 5, no. 12, 1963, 3574-3579

TOPIC TAGS: graphite, electrical resistivity, galvanomagnetic effect, graphite monocrystal, electric resistance, galvanomagnetism, graphite single crystal

ABSTRACT: By using the approximation of relaxation time and solving Boltzmann's equation, the authors have obtained formulas for the galvanomagnetic effects in any arbitrary magnetic field (directed along the trigonal axis, but not reaching such a magnitude that quantum effects begin to play a part). They have compared their results with the experimental dependence of single crystals of graphite in the temperature range 290-450K in fields up to 5000 oersteds and at hydrostatic pressures up to 9000 atm. This material is summarized in Figs. 1 and 2 on the Enclosures. "In conclusion, we take this opportunity to express our thanks to R. G. Arkhipov and A. I. Lichten for useful discussions of the work." Orig. art. has: 4 figures, 2 tables, and 27 formulas.

~~Inst. of the Physics of High Pressures~~ A.S. USSR
Inst. of the Physics of High Pressures
Moscow

POSPELOV, Yu.A.; KECHIN, V.V.

Electric resistance of graphite and its dependence on the magnetic field.
Fiz. tver. tela 5 no.12:3574-3579 D '63. (MIRA 17:2)

1. Institut fiziki vysokikh davleniy AN SSSR, Moskva.

ARKHIPOV, R.G.; KECHIN, V.V.; LIKHTER, A.I.; POSPELOV, Yu.A.

Galvanomagnetic effects in graphite and deformation of the
electron spectrum of graphite under pressure. Zhur. eksp. i
teor. fiz. 44 no.6:1964-1973 Je '63. (MIRA 16:6)

1. Institut fiziki vysokikh davleniy AN SSSR.
(Graphite—Galvanomagnetic properties)
(Electrons—Spectra)

POSPELOV, Yu.A.

Temperature dependence of σ_{zz} graphite. Fiz. tver. tela 6 no.5:
1525-1527 My '64. (MIRA 17:9)

1. Institut fiziki vysokikh davleniy AN SSSR, Moskva.

LIVANOV, Aleksandr Pavlovich; POSLELOV, Yury Andreyevich; SOFRONOV,
Aleksandr Vladimirovich; PRASOLOV, B.A., red.; PLESKO, Ye.P.,
red.izd-va; AKOPOVA, V.M., tekhn. red.

[Organization of fuel and lubrication service at logging
camps] Organizatsiya goriuchie-smazochnogo khoziaistva v les-
promkhozakh. Moskva, Goslesbumizdat, 1963. 199 p.
(MIRA 16:12)

(Motor fuels) (Lubrication and lubricants)

L 13633-63 EPR/EWT(1)/EPF(c)/EWP(q)/EWT(m)/BDS AFFTC/ASD Ps-4/
Pr-4/ WH/WH/IJP(C)/K
ACCESSION NR: AP3003127 8/0056/63/044/006/1964/1973 72
70

AUTHOR: Arkhipov, R. G.; Kechin, V. V.; Likhter, A. I.; Pospelov, Yu. A.

TITLE: Galvanomagnetic effects in graphite and the deformation of the electron spectrum of graphite under pressure

SOURCE: Zhurnal eksper. i teor. fiziki, v. 44, no. 6, 1963, 1964-1973

TOPIC TAGS: Galvanomagnetic effects in graphite, electron spectrum deformation, magnetoresistance high pressures, temperature dependence of resistance, Hall coefficient

ABSTRACT: A theory of the galvanomagnetic properties of graphite is developed and formulas are derived for the limiting case of high temperatures, using the relaxation-time approximation and the energy spectrum of graphite obtained by Slonczewski and Weiss (Phys. Rev. 109, 272, 1958). The galvanomagnetic coefficients of graphite were also measured under pressures up to 10000 atmospheres and at temperatures up to + 90° C, using a method similar to that described by Likhter and D'yakonova (FTI, v. 1, 95, 1959 and PTE, no 2, 127,

Card 1/82

L 13633-63
ACCESSION NR: AP3003127

1960). At the same time, the temperature dependence of the coefficients was obtained up to +150°C at atmospheric pressure. The theory makes it possible to separate the effects due to the lattice from those due to the conduction electrons, and the measurement of the galvanomagnetic effect gives satisfactory accuracy and is technically much simpler than the use of other standard methods of determining the energy spectrum (cyclotron resonance, de Haas -- van Alphen effect, absorption of ultrasound, etc.). An analysis of the experimental data on the temperature dependence of the resistance to +150°C, yields a simple dependence of the relaxation time on the temperature and on the quasi-momentum. A combined quantity (Q) is defined and is found to be independent of the temperature up to pressures of 10000 atmospheres, so that it can be used to find the dependence of the energy-spectrum parameters on the distance between layers, using measurements of the resistance and galvanomagnetic coefficients as functions of pressure and temperature: this permits determination of the deformation of the energy spectrum of graphite under pressure. At 10000 atmospheres, the total number of carriers in graphite increases by 23% and the relaxation time increases by 3%. "In conclusion it is a pleasure to thank L. F. Vereshchagin for continuous interest and useful discussion." Orig. art. has: 7 figures, 25 formulas, and 1 table.

Card 2/32

Inst. of High Pressure Physics

MIKELADZE, G.Sh.; NADIRADZE, Ye.M.; PKHAKADZE, Sh.S.; GOGORISHVILI, B.P.; DGEBAUDZE, G.A.; SOLOSHENKO, P.S.; SEMENOV, V.Ye.; BARASHKIN, I.I.; SHIRYAYEV, Yu.S.; POSPELOV, Yu.P.; KATSEVICH, L.S.; ROZENBERG, V.L.; Prinimali uchastiye: LORDKIPAHIDZE, I.S.; TSKHVEDIANI, R.N.; DZODZUASHVILI, A.G.; DUNIAVA, A.G.; PERARSKIY, L.F.; GRITSFNYUK, Yu.V.; ZHELTOV, D.D.; LUZANOV, I.I.; GLADKOVSKIY, V.P.; PODMOGIL'NYY, V.P.; VOROPAYEV, I.P.; BRIKOVA, O.V.; VRUBLEVSKIY, Yu.P.; KLYUYEV, V.I.; BAYCHER, M.Yu.; LOGINOV, G.A.; SHILIN, V.K.; POPOV, A.I.; ZASLONKO, S.I.

Industrial experiments in the smelting of 45 o/o ferrosilicon in
a heavy-duty closed electric furnace. Stal' 25 no.5:426-429 My '65.
(MIRA 18:6)

1. Gruzinskiy institut metallurgii (for Lordkipanidze, Tskhvediani,
Dzodzuashvili, Guniava). 2. Nauchno-issledovatel'skiy i proyektnyy
institut metallurgicheskoy promyshlennosti (for Brikova, Vrublevskiy,
Klyuyev). 3. Vsesoyuznyy nauchno-issledovatel'skiy institut elektro-
termicheskogo oborudovaniya (for Baycher, Loginov, Shilin, Popov,
Zaslonko).

GLEBOVA, M.Ye.; GERTSOVICH, G.B., kand.ekon.nauk, red.; KARYAGIN, I.D.,
red.; KIM, V.A., red.; POSPELOV, Yu.S., vedushchiy red.; TIMOKHIN,
I., tekhn.red.

[Economic development of the Korean People's Democratic Republic;
brief economic review] Razvitiye ekonomiki Koreiskoi Narodno-De-
mokraticeskoi Respubliki; kratkii ekonomicheskii obzor. Moskva,
Vses. institut nauchn. i tekhn.informatsii, 1959. 88 p. (Tekhniko-
ekonomicheskie obzory po stranam narodnoi demokratii) (MIRA 12:12)
(Korea, North--Economic conditions)

PROSKURYAKOV, A.V., kand.tekhn.nauk; red.; POPOV, I.V., kand.ekonom.nauk, red.; TOMASHPOL'SKIY, L.M., kand.ekonom.nauk, red.; GOLOVINSKIY, G.P., kand.tekhn.nauk, red.; SOKOLOV, Yu.S., kand.ekonom.nauk, red.; CHUTKERASIVILI, Ye.V., kand.ekonom.nauk, red.; BERMAN'YEVA, S.I., red.; ZAKHAROVA, L.S., red.; KOLCHINA, V.I., red.; POSPELOV, Yu.S., red.; SMERTINA, N.I., red.; SOBOLEVA, N.M., tekhn.red.

[Great Britain; economic survey] Velikobritaniia; ekonomicheskii obzor. Moskva, 1960. 658 p. (MIRA 13:5)

l. Moscow. Vsesoyuznyy institut nauchnoy i tekhnicheskoy informatsii.

(Great Britain--Economic conditions)

POSPELOVA, A.

BARTENEV, S.I.; POSPELOVA, A.

AB-1 automatic defect inspection machine. Spirt.prom. 22 no.3:9-
11 '56. (MIRA 9:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut spirtovoy promyshlennosti.

(Distilling industries--Equipment and supplies)

YEFIMOV, Fedor Nikolayevich; POSPELOVA, A.M., ved. red.

[Magnetic-fractional-mineralogical (MFMA) analysis of
rocks] Magnitno-fraktsionno-mineralogicheskii analiz
(MFMA) gornykh porod. Moskva, Nedra, 1964. 223 p.
(MIRA 17:11)

KOROVYAKOV, I.A.; NELYUBIN, A.Ye.; RAYKOVA, Z.A.; KHORTOVA, L.K.; GON'SHAKOVA, V.I., nauchnyy red.; POSPELOVA, A.M., red.izd-va; IYERUSALIMSKAYA, Ye., tekhn.red.

[Origin of Noril'sk trap intrusions bearing sulfide copper-nickel ores.] Proiskhozhdenie noril'skikh trappovykh intruzii, nesushchikh sul'fidnye medno-nikelevye rudy. Moskva, Gosgeoltekhnizdat, 1963. 100 p. (Moscow. Vsesoyuznyi nauchno-issledovatel'skiy institut mineral'nogo syr'ya. Trudy, no.9). (MIRA 17:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya (for Korovyakov, Nelyubin, Raykova, Khortova).

POSPELOVA, A.P.

Anatomy of the dorsal artery of the foot. Vest. khir. 24
no. 4:66-70 Ap '60. (MIRA 14:1)
(FOOT---BLOOD SUPPLY)

POSPELOVA, A. P.

POSPELOVA, A. P. -- "On the Anatomy of the Arteries of the Shin and Foot of Man." First Moscow Order of Lenin Medical Inst imeni I. M. Sechenov. Moscow, 1955. (Dissertation for the Degree of Candidate in Medical Sciences).

So.: Knizhnaya Letopis', No. 2, 1956.

POSPELOVA, A.V.

Significance of electrophoretic examination of blood serum proteins
in the evaluation of active rheumatic fever. Terap. arkh. 32 no. 4:58-
62 S '60. (MIRA 14:1)

(RHEUMATIC FEVER) (BLOOD PROTEINS)

POSPELOVA, A.V., aspirant

Electrophoretic study of blood serum proteins in the diagnosis
of active rheumatic fever. Uch. zap. GMI no.8:62-65 '59.
(MIRA 14:9)

1. Iz kafedry propedevtiki vnutrennikh bolezney (zav. kafedroy -
prof. K.G. Nikulin).
(RHEUMATIC FEVER) (BLOOD PROTEINS)
(ELECTROPHORESIS)

POSPELOVA, A.V., aspirant (Gor'kiy)

Electrophoretic method of studying the blood serum proteins
for diagnosing latently progressing active rheumatism. Kaz.
med. zhur. no.1:72-73 Ja-F '62. (MIRA 15:3)
(RHEUMATIC HEART DISEASE)
(BLOOD PROTEINS)
(ELECTROPHORESIS)

Data for
POSPELOVA, A. V., CAND MED SCI, "MATERIAL ON THE DIAGNOSIS
OF RECURRENT RHEUMATIC CARDITIS." VOLGOGRAD, 1961. (VOLGO-
GRAD STATE MED INST). (KL-DV, 11-61, 229).

-279-

POSPEROVA, E. A.

Dyeing the bottom of footwear. V. A. Gold'stein, E. A. Pospelova, and V. P. Gudkava, U.S.S.R. 164,180, Nov. 20, 1957. The leather for the bottom of footwear is colored with a mixt. of casein, glyptal, an aq. dispersion of a vinylene dichloride-chlorovinyl copolymerization product, and the desired pigments. M. Heschel

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001342610020-2

POSPELOVA, E.S.,
A.S. ANDREEV, (J. anal. Chem. USSR 1951, 6, 375-382)

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001342610020-2"

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001342610020-2

POSPYLOVA, E. S.

A. S. ANDREYEV, Zhur Analit Khim, Nov.-Dec. 1951, p. 376-382

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001342610020-2"

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001342610020-2

POSPELOVA, E. S.
O. P. AZBELEVAN, Zavod Lab 16, 1950

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001342610020-2"

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001342610020-2

POSPELOVA, E. S.

A. S. ANDREEV, ZhAKh, 6, 375-82(1951)

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001342610020-2"

S/049/60/000/01/004/027
E201/E191

AUTHOR: Pospelova, G.A.

TITLE: The Origin of the Reverse Magnetization of the Igneous Rocks of Armenia and Kuril Islands

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geofizicheskaya, 1960, No 1, pp 37-49

TEXT: Samples of igneous rocks from Armenia and Kuril Islands were analysed for their ferromagnetic components (magnetite, titanomagnetite, haematite - cf. photomicrographs in Fig 1) and the magnetic properties of those components were determined. The analysis showed that some of the Lower Quaternary and Upper Pliocene rocks were magnetized in a direction opposite to that of the present geomagnetic field (Table 1). The reverse polarity of the rocks is explained by the change of the geomagnetic field during the aforementioned periods. Some of the results of the analysis are illustrated in Figs 2-10 and in Table 2; thermal demagnetization curves in Figs 2-6; magnitude of magnetization of samples with different petrographic structures in Fig 7; fields required to destroy direct and reverse magnetization in Fig 8; demagnetization curves in a.c. fields in Fig 9; Card 1/2

S/049/60/000/01/004/027
E201/E191

The Origin of the Reverse Magnetization of the Igneous Rocks of Armenia and Kuril Islands

a.c. fields needed to produce 10% demagnetization in Fig 10; magnitude and sign of magnetization and susceptibility of samples from different periods in Table 2.

There are 10 figures, 2 tables and 18 references: 3 Soviet, 10 English, 3 French and 2 German.

ASSOCIATION: Akademiya nauk SSSR, Laboratoriya vulkanologii
(Volcanology Laboratory, Academy of Sciences, USSR)

SUBMITTED: June 22, 1959

Card 2/2

✓

Pospelova, G.A.

AUTHORS: Petrova, G. N. and Pospelova, G. A. 49-6-3/21

TITLE: On certain features of thermo-magnetisation. (O nekotorykh
osobennostyakh termonamagnichivaniya).

PERIODICAL: "Izvestiya Akademii Nauk, Seriya Geofizicheskaya"
(Bulletin of the Ac.Sc., Geophysics Series), 1957, No.6,
pp. 728-736 (U.S.S.R.)

ABSTRACT: There is not only a quantitative but fundamentally also a qualitative difference between the effects of normal, ideal and thermo-magnetisation. The quantitative differences between the normal, ideal and thermo-magnetisation of magnetite from the Kursk magnetic anomaly in a field range of 0 to 250 Oe are plotted in Fig.1, p.728. Whilst the normal and ideal magnetisation show certain analogies, the thermo-magnetisation is fundamentally different and the values of the normal, ideal and thermo-magnetisation at various temperatures are plotted in Fig.2, p.729. The three types of magnetisation differ from each other only owing to the presence in the ferromagnetics of a crystallographic anisotropy and particularly of magnetostriction stresses. Increase of all the three types of magnetisation will be equal if there are either no stresses at all or

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49-6-3/21

On certain features of thermo-magnetisation. (Cont.) if these are stabilised, i.e. if the number of domains capable of overcoming these stresses are orientated along the field and are constant for a given field. The difference in the percentual increase of the three types of magnetisation indicates the presence of stresses which increase with decreasing temperature. The difference in the percentual increase of the ideal and normal magnetisation depends on the ratio of the energy of the thermal motion and on the additional energy of the alternating magnetic field. Experimental results have shown that not only metallic ferromagnetics but also ferrites become magnetically anisotropic in the case of thermal magnetisation, although the specimens under consideration did not have a natural anisotropy; such an anisotropy was also detected in natural rocks in horizontal and vertical directions in the regions of the Kursk magnetic anomaly. The capability of producing a stable texture which is disrupted only after repeated heating to a temperature above the Curie point is one of the fundamental features of thermal magnetisation which differs from those of the other types of magnetisation. Thermo-magnetisation brings the material into a new and qualitatively different state, the material assumes new properties, namely,

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49-6-3/21

On certain features of thermo-magnetisation. (Cont.)

a higher stability of the residual magnetisation, a predominance of irreversible processes in weak magnetic fields and a weak anisotropy. Most rock formations are thermo-magnetic and, therefore, it is incorrect to extend to these the relations governing normal magnetisation. Thus, interpretation of anomalies without taking into consideration thermo-magnetisation may lead to erroneous conclusions. If it is not possible to measure the I_r of the rocks, it is necessary to evaluate, at least from the geological characteristics, whether these rocks have cooled down from high temperatures or whether their magnetisation has been produced at an ordinary temperature and is, therefore, more or less proportional to its susceptibility. P. N. Dvoryaninova participated in the experiments.

Card 3/3

There are 9 figures, 1 table and 9 references, 6 of which are Slavic.

SUBMITTED: September 4, 1956.

ASSOCIATION: Institute of Physics of the Earth, Ac.Sc. U.S.S.R.
(Akademiya Nauk SSSR Institut Fiziki Zemli).

AVAILABLE: Library of Congress

L 34972-66 EWT(1) GW

ACC NR: AP6021223

SOURCE CODE: UR/0210/66/000/004/0099/0106
*22
3*AUTHOR: Corbunov, M. G.; Pospelova, G. A.

ORG: Tomsk State University (Tomskiy gosudarstvennyy universitet); Institute of Geology and Geophysics, Siberian Department, AN SSSR (Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR)

TITLE: Paleomagnetic investigations in the Lower Miocene lake clays of the Tym River (Western Siberia)

SOURCE: Geologiya i geofizika, no. 4, 1966, 99-106

TOPIC TAGS: paleomagnetism, Upper Oligocene, Lower Miocene, magnetic declination, magnetic inclination, remanent magnetization, viscous magnetization

ABSTRACT: Paleomagnetic investigations have been carried out on lake clays taken from the banks of the River Tym in Belyy Yar in the Kompasskiy Bor region in Northwest Siberia. The clay was lens-shaped and belonged to the Upper Oligocene. Nine patterns were taken from various places in the lens. Patterns were studied in the laboratory of the Institute of Geology and Geophysics of the Siberian Department of the Academy of Sciences of the USSR. Patterns taken from the middle of the lens had weak magnetization and those taken from the upper part had stronger magnetization. Magnetization of all patterns was inverse to the present state of the earth's field.

Card 1/2

UDC: 550.382.3(571.16)

POSPELOVA, G. A., Cand Phys-Math Sci (diss) -- "Comparative investigations of positively and negatively magnetized effusive rock". Moscow, 1960. 14 pp (Acad Sci USSR, Inst of Phys of the Earth), 125 copies (KL, No 10, 1960, 125)

YEZERSKIY, A.N., inzh.; TREBUKOV, P.D.; POSPELOVA, G.L., red.; KOLOMSYER,
V.Z., tekhn.red.

[Polystyrene facing tiles] Oblitsovochnye plitki iz polistirola.
Moskva, Akad.stroitel'stva i arkhit. SSSR, 1959. 26 p.

(MIRA 13:6)

1. TSentral'naya nauchno-issledovatel'skaya laboratoriya stroy-
materialov khimicheskoy promyshlennosti (TsNIIKhIMSTROY) (for
Yezerskiy, Trebukov).
(Plastics) (Tiles)

POSPEROVA, G. A.

PETROVA, G.N.; POSPEROVA, G.A.

On some characteristics of thermal magnetization. Izv. AN SSSR.
(MIRA 10:7)
Ser. geofiz. no.6:728-736 Je '57.

1. Akademiya nauk SSSR, Institut fiziki Zemli.
(Magnetism, Terrestrial)

POSPELOVA, G. L., inzhener

The use of a tip measuring device in the match industry. Der.prom.
4 no.8:17-18 Ag '55. (MLRA 8:10)

1. Glavfanspichprom
(Match industry)

POSPELOVA, G.L.

TEMKINA, P.Z., starshiy nauchnyy sotrudnik; PLOTNIKOVA, G.P., starshiy nauchnyy sotrudnik; MIRKOVICH, P.A., starshiy nauchnyy sotrudnik; POSPELOVA, G.L., red.; SHENDAREVA, L.V., tekhn. red.; KOLOMETYEV, V.Z., tekhn. red.

[Fillers for adhesive urea resins and protein-base glues] Napolniteli dlia kleishchikov karbamidnykh smol i belkovykh kleev. Moskva, Tsentral'noye nauchno-issledovatel'skiy institut fanery i mebeli. shchei promyshl., 1958. 13 p. (MIRA 11:10)

1. Tsentral'nyy nauchno-issledovatel'skiy institut fanery i mebeli.
(for Temkina, Plotnikova, Mirkovich).
(Glue) (Veneers and veneering)

YEZERSKIY, A.N., inzh.; TREBUKOV, P.D.; POSPELOVA, G.L., red.;
KOLOMEYER, V.Z., tekhn.red.

[Polystyrene facing tiles] Oblitsovochnye plitki iz polistirola.
Moskva, Tsentr.biuro tekhn.informatsii bumazhnoi i derevoobra-
batyvaiushchei promyshl., 1960. 30 p. (MIRA 14:1)
(Tiles)

RYZHOVA, N.A.; DVOYRINA, G.Ya.; POSPELOVA, G.L., red.; MILIKVSOVA,
I.F., tekhn. red.

[Finishing of wood particle boards] Otdelka struzhechnykh plit.
Moskva, Tsentral. in-t tekhn. informatsii i ekon. issl. po lesnoi,
bumazhnoi i derevoobrabatyvaiushchey promyshl., 1962. 33 p.
(MIRA 16:1)

(Hardboard) (Wood finishing)

TANSKIY, V.V., inzh.; POSPELOVA, G.L., red.; KOLOMEYER, V.Z., tekhn.red.

[Using synthetic materials in building (floors, roofing, and
waterproofing materials, heat insulating and acoustical materials)]
Primenenie sinteticheskikh materialov v stroitel'stve (poly, krovlia,
teplo-, zvuko i gidroizoliatsiya). Moskva, TSentr.biuro tekhn.
informatsii Glavstandartdoma, 1959. 34 p. (MIRA 13:1)

1. Gosudarstvennyy proyektnyy institut No.2 (for Tanskiy).
(Plastics)

LABKOVSKIY, S.S.; POSPELOVA, G.L., red.

[Elastic polymer materials in the furniture industry]
Elastichnye polimernye materialy v proizvodstve mebeli.
Moskva, Tsentral'no-nauchno-issledovatel'skiy in-t informatsii i tekhnicheskikh issledovanii po lesnoi, tselliulozno-bumazhnoi, derevoobrabatyvaiushchey promyshl. i lesnomu khoz., 1964.
(MIRA 18:4)
60 p.

KORSHUN, L.L.; NOTKIN, M.M.; NIKITINA, E.S.; SINELOBOV, M.A.;
POSPELOVA, G.L., nauchn. red.; PETRENKO, V.M., tekhn.
red.

[Finishing veneerless particle boards] Otdelka nefanerovannykh struzhechnykh plit. Moskva, TSentr. nauchno-issled. in-t informatsii i tekhniko-ekon. issledovanii po lesnoi tselliulozno-bumazhnoi, derevoobrabatyvaiushchei promyshl. i lesnomu khoz. 1963. 22 p. (MIRA 16:11)
(Particle board) (Wood finishing)

POSPELOVA, G.L., nauchn. red.: USANOVA, F., nauchn. red.

[New finishing materials and the mechanization of the processes of furniture finishing; materials] Novye otdelochnye materialy i mekhanizatsiya protsessov otdelki mebeli; materialy. Moskva, Tsentral'nyi in-t tekhn. informatsii i ekon. issled. po lesnoi, bumazhnoi i derevooobrabatyvaiushchey promishlennosti, 1963. 43 p. (MIRA 17:7)

1. Soveshchaniya rabotnikov mebel'noy promyshlennosti na temu "Novyye otdelochnyye materialy i mekhanizatsiya protsessov otdelki mebeli." Moscow, 1962.

ZAGOSKINA, G.V., red.; SHLUDCHENKO, Ye.M., red.; POSPELOVA,
G.L., red.

[Production of particle board; based on the materials of
the seminars] Proizvodstvo drevesno-struzhechnykh plit; po
materialam seminarov. Moskva, Tsentr.nauchno-issl. in-t
informatsii i tekhniko-ekon. issledovanii po lesnoi, tsel-
liulozno-bumazhnoi, derevoobrabatyvaiushchei promyshl. i
lesnomu khoz., 1964. 105 p. (MIRA 18:8)

1. Vsesoyuznyy seminar rabotnikov predpriyatiy drevesno-
struzhechnykh plit, osnashchenykh otechestvennym oboru-
dovaniyem. 1964.

LAEKOVSKIY, S.S.; POSPELOVA, G.L., red.; PETRENKO, V.M., tekhn.
red.

[Finishing particle boards with polyvinyl chloride films]
Otdelka struzhechnykh plit polivinilkloridnymi plenkami.
Moskva, TSentr. inst. tekhn. informatsii i ekon. issl. po
lesnoi, bumazhnoi i derevoobrabatyvaiushchei promyshli.,
1963. 55 p. (MIRA 16:10)

(Particle board) (Wood finishing)
(Plastic films)

POSPELOVA, G.L., red.; KOLOMEYER, V.Z., tekhn.red.

[Foreign methods; finishing and laminating of wood]

Zarubezhnaia tekhnika; otdelka i skleivanie drevesiny.

Moskva, TSentr.biuro tekhn.informatsii Glavstandartdoma,

1959. 55 p.

(MIRA 13:1)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam
stroitel'stva.

(Wood finishing) (Plywood)

KAREL'SHTEYN, I.M.; POSPELOVA, G.L., red.

[Plastics in the furniture industry; a review] Plasti-
cheskie massy v mebel'noi promyshlennosti; obzor. Mo-
skva, TSentr. nauchno-issl. inst informatsii i tekhniko-
ekon. issledovaniia po lesnoi, tselliulozno-bumazhnoi,
derevoobrabatyvaiushchei promyshl i lesnomu khoz., 1963.
(MIRA 17:9)
134 p.

1. TSentral'noye proyektno-konstruktorskoye byuro po me-
beli (for Karel'shteyn).

FOSTELOVA, G. N.

"Reflective Contractures and Paralysis. Clinical Observations and Treatment." Thesis for degree of Cand. Mediacial Sci. Sub 28 Apr 49, Inst of Neurology, Acad Med Sci USSR.

■ Summary 82, 18 Dec 52, Dissertations Presented For Degrees in Science and Engineering in Moscow in 1949. From Vechernyea Foskva, Jan-Dec 1949.

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001342610020-2

POSPELOVA, G. N. (Dr., Prof.) (Moscow)

"Quærtiones neurologicae in operibus Institutorum balneologiae et physiotherapiae
investigandæ in URSS"

paper submitted for the Intl. Balneological Congress, Czechoslovakia,
8-13 Sept 1958.

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001342610020-2"

TIMAKOV, V.D., ovt. red.; AGAYEV, B.M., red.; ALIYEV, A.I., prof.,(Baku),
GUSEYNOV, D.Yu., red.; VASYUKOVA, Ye.A., prof., red.; ZHUKOVSKIY,
M.A., starshiy nauchnyy sotr., red.; POSPELOVA, G.N., dotsent,
red.; POD"YAPOL'SKAYA, prof.(Moskva), red.; PASHAYEV, T.G., prof.
(Baku), red.; POGOSKINA, M.V.,tekhn. red.

[Transactions of an out-of-town session of the Academy of Medical
Sciences of the U.S.S.R. in Baku] Trudy Vyezdnoi sessii Akademii
meditsinskikh nauk SSSR v Baku. Moskva, Gos. izd-vo med. lit-ry,
Medgiz, 1961. 335 p. (MIRA 14:8)

1. Akademiya meditsinskikh nauk SSSR, Moscow. 2. Vitse-prezident
AMN SSSR (for Timakov). 3. Ministr zdravookhraneniya Azerbayd-
zhanskoy SSR (for Agayev). 4. Chlen-korrespondent AN Azerbaidzhans-
koy SSR (for Guseynov). 5. Chlen-korrespondent AMN SSSR (for Pod"ya-
pol'skaya)

(GOITER) (WORMS, INTESTINAL AND PARASITIC)
(HEALTH RESORTS, WATERING PLACES, ETC.)
(PETROLEUM WORKERS—DISEASES AND HYGIENE)

IL'ICHEVA, Ye.M., nauchn. sotr.; SHIVAREVA, Yu.N., nauchn. sotr.;
KURASHOV, S.V., red.; COL'DFAYL', L.G., red.; POSPELOVA,
G.I., red.; Prinimali uchastiye: BAKHMAT, V.I., kand. fiz.
nauk, red.; IVANOV, V.V., kand. med. nauk, red.; KARAYEV,
R.G., kand. med. nauk, red.; LARICHEV, L.S., red.; NEVRAYEV,
G.A., red.; OPPENGEYM, D.G., kand. med. nauk, red.;
POLTORANOV, V.V., red.; CHUBUKOV, L.A., doktor geogr. nauk,
red.; VUL'FSON, I.Z., red.; KUZ'MINA, N.S., tekhn. red.

[Health resorts of the U.S.S.R.] Kurorty SSSR. Moscow, Medgiz,
1962. 797 p. (MIRA 15:11)
(HEALTH RESORTS, WATERING PLACES, ETC.)

ZHIL'TSOVA, N.N.; POGREBOVA, G.N.

State of peripheral blood circulation in migraine patients;
from data of arterial oscillography. Zhur. nevr. i psikh. 64
no. 9:1334-1340 '64. (MIRA 17:12)

1. TSentral'nyy institut kurortologii i fizioterapii, Moskva.

KACHUR, L.A.; POSPELOVA, I.I.

Dosage estimation in intratissue introduction of radioactive
colloidal gold. Vestn. rent. i rad. 38 no.3:59-60 My-Je '63.
(MIRA 17:7)

1. Iz radiologicheskogo otdeleniya Tsentral'nogo nauchno-
issledovatel'nogo instituta meditsinskoy radiologii (direktor
Ye.I. Vorob'yev).

SHIMON, Aleksandr Alekseyevich; POSPELOVA, I.M., red.

[Technical means of cultural and educational work; a
textbook] Tehnicheskie sredstva kul'turno-prosvetitel's-
noi raboty; uchebnik. Izd.2., ispr. i dop. Moskva,
Sovetskaia Rossiia, 1964. 325 p. (MIRA 19:1)

SHCHEGOLEV, Nikolay Vladimirovich; POSPELOVA, I.M., red.

[Ubiquitous polymer] Polimer vezdesushchii. Moskva, Sovetskai Rossiiia, 1965. 158 p. (MIRA 18:8)

PASETSKIY, Vasiliy Mikhaylovich; POSPELOVA, I.M., red.

[What Polar poppies whispered about] O chem sheptalis'
poliarnye maki. Moskva, Sovetskaia Rossiia, 1965. 189 p.
(MIRA 18:8)

Pospelova, I. N.
USSR/Physical Chemistry, Electrochemistry.

B-12

Abs Jour : Ref Zhur - Khimiya, No 7, 1957, 22509.

Author : I. N. Pospelova, A. A. Rakov, S. Ya. Pshezhetskiy.

Inst : Not given

Title : Electrochemical Study of Properties of Surface Compounds of Oxygen on Silver.

Orig Pub : Zh. fiz. khimii, 1956, 30, No 7, 1433-1437.

Abstract : Silver oxygen compounds produced 1) by action of gaseous O_2 at 250° on Ag and 2) in process of theylene oxydation on Ag, which is used as a catalyst, were studied by method of plotting of charge curves (CC) in 0.1 n KOH. Cathodic CC for electrically oxidized Ag are linear in first approximation, which indicates a non-heterogeneity of energy of Ag oxides produced in these conditions. Supplementary oxidation of electro-chemically oxidized Ag by methods 1 and 2 brings about a formation of an important amount of a determined composition: CC of such an Ag has a big horizontal zone corresponding to an oxide reduction of $\sim +1.1$ v (on a horizontal hydrogen electrode). Ag with a sufficiently homogeneous surface after a supplementary oxidation by methods 1 and 2 is characterized by

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-175-

5(4)

AUTHORS: Cherednichenko, V. M., Pospelova, I. N., Pshezhetskiy, S. Ya.

SOV/76-32-12-3/32

TITLE: The Effect of Ozone on the Speed of Combustion of Hydrocarbons (Vliyanie ozona na skorost' gorenija uglevodorodov)

PERIODICAL: Zhurnal fizicheskoy khimii, 1958, Vol 32, Nr 12,
pp 2673 - 2678 (USSR)

ABSTRACT: A mixture of n-butane, n-heptane, iso-octane (2,2,4-trimethylpentane), and cyclohexane with air or oxygen was burnt with varying ozone additions. The rapid combustions were photographed with a photorecorder F R -60, the slow ones with a time lapse motion camera. The combustion temperature was calculated with the help of the thermodynamical tables of the NACA (Ref 3) (Nat.Ass.Chem.Am.). The rate of combustion of an n-butane-air mixture corresponds to M. Gerstein's (Ref 4) statements. Ozone accelerates the rate of combustion and increases the combustion temperature. The experimental results showed much higher values than were to be expected according to Ya. B. Zel'dovich's and D. A. Frank-Kamenetskiy's

Card 1/3

The Effect of Ozone on the Speed of Combustion of Hydro- SOV/76-32-12-3/32
carbons

theory. Consequently, ozone does not only influence the physical process but exerts an essential influence on the chemical kinetics by dissociating into atomic oxygen. Results were compared with the influence of ozone on the critical conditions for the inflammation of butane-oxygen mixtures (S. A. Kamenetskaya, S. Ya. Pshezhetskiy, and N. A. Slavinskaya, Ref 1). The increase in the rate of combustion due to ozone is especially striking at low temperatures. At higher temperatures cracking reactions of the hydrocarbon molecules and radicals, and equilibrium concentrations of free radicals and atoms become more and more predominant. There is a linear relation between the rate of combustion and $\sqrt{C_{O_3}}$ (C_{O_3} - ozone concentration). C. C. Schubert and R. N. Pease (Ref 5) made similar observations with slow reactions at room temperature. There are 4 figures, 4 tables, and 7 references, 3 of which are Soviet.

Card 2/3

The Effect of Ozone on the Speed of Combustion of Hydro- Sov/76-32-12-3/32
carbons

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova, Moskva
(Physico-Chemical Institute imeni L. Ya. Karpov, Moscow)

SUBMITTED: May 31, 1957

Card 3/3

Kospe (Copy 1, n)

PHASE I BOOK EXPLOITATION SAV/AJ96

Moscow. Fiziko-Khimicheskiy Institut
Problemy fizicheskoy khimii trudy VTP. 2 (Problems in Physical
Chemistry: Transactions of the Institute, no. 2). Moscow,
Goskinozdat 1959. 202 pp. 1,000 copies printed.

Editorial Board: Ya. M. Vaynshteyn; Doctor of Chemical Sciences;
O. S. Zhdanov; Doctor of Chemical Sciences; G. A. Karlin;
A. A. Andrianov; Ya. M. Kolosov; Doctor of Chemical Sciences
(Respubl.); S. S. Katskev; Academician; S. Ye. Pahomovskiy;
Doctor of Chemical Sciences; V. M. Chernomurchenko; Candidate
of Chemical Sciences; V. A. Chusakov; Editorial Secretary;
Candidate of Chemical Sciences; Dr. I. A. Myasnikova; Tech.,
Ed.; Mr. G. Smok.

PURPOSE: This collection of articles is intended for physical
chemists.

Coverage: The collection is the second issue of the Transactions
of the Scientific Research Institute of Physical Chemistry
named after D. Ia. Karlov. It contains 17 articles which review
Chap. 1,5

Feinikin, M. I., N. M. Morozov, V. M. Pyshnev (deceased), O. Apelbaum, L. A. Lukashina, and V. A. Peleshkin. The Oxida- tion of Ammonia Over a Nonplatinum Catalyst. 14
Fedorishin, S. Ya., S. A. Kazantseva, T. I. Grishova, A. V. Rukavitsa, N. M. Korotova, I. N. Prokof'eva, A. V. Vin- tik, M. M. Shubinskaya, N. A. Sivina, V. V. Slobodchikov, N. Chernomur- chenko. Kinetics of Decomposition, and the Explosion of Ozon- Heterocyclic Juro (Japan). How to Find the Kinetic Equation of a Reversible Reaction. 27
Rodnitskii, Yu. M. The Effect of the Specific Absorption of Atoms on the Kinetics of Hydrogen Evolution and the Structure of the Metal-Solution Boundary. 50
Vaynshteyn, Ya. M. The Nature and Mechanism of Electro- philic Substitution Exchange. 61
Zvezdochkin, V. V. Crystallochemical Data on the Nature of Radiation-Induced in the System Zirconium-Nitrogen at High Temperatures and the Dependence of the Free Energy of Zirconium Formation on its Composition and Structure. 97
Bukreev, A. Ph., M. A. Dzhaparidze, L. I. Sutina, and Yu. S. Ryabchuk. Study of the Poly- or Polyc- o-Derivatives From a Cylindrical Precursor With Cobalt as a Power Full Source of γ -Radiation. 107
Rodnitskii, Yu. M., B. O. Vasilev'ev, and N. N. Pustovat'. Study of the Ionization and Disociation of Water and α -Helium Molecules by the Method of Bombardment With Quasi- Monokinetic Electrons. 132
Razmikyan, A. S. Radiation-Chemical Effects in Solid Inorganic Salts. 163
Makarevich, M. I., A. V. Zirid', and R. V. Demchagyan. Radiation-Chemical Chlorination of Benzene Compounds. Products of Phenol Formed During the Radiolysis of Benzene in an Aqueous Solution. 169
Shestopal', V. A., and G. A. Gol'der. The Problem of the Phase Composition of the System $H_2O-NaNO_3-NaOH$ at Low Temperatures. 183
Kostyleva, P. N. Formation, and V. A. Prokof'ev, L. I. Composition Products of Phenol Formed During the Radiolysis of Benzene in an Aqueous Solution. 189
Ortmuyuz, V. D., and A. A. Zanshchova. Sensitization of the Radiolytic Oxidation of Leucocolor Dyes. 194

Pospelova, I.N.

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PHASE I BOOK EXPLOITATION

SOV/2267

Akademiya nauk SSSR. Energeticheskiy institut

Kinetika i rasprostraneniye plameni; sbornik dokladov na obshchemoskovskom seminare po goreniiyu pri energeticheskem institute AN SSSR (Kinetics and Propagation of Flame; Collection of Reports at the All-Moscow Seminar on Combustion) Moscow, Izd-vo AN SSSR, 1959. 51 p. Errata slip inserted. 2,500 copies printed.

Ed.: L. N. Khitrin, Corresponding Member, USSR Academy of Sciences; Ed. of Publishing House: A. G. Prudnikov; Tech. Ed.: O. M. Gus'kova; Seminar Council: L. N. Khitrin, Corresponding Member, USSR Academy of Sciences (Chairman), G. F. Knorre, Doctor of Technical Sciences, Honored Worker in Science and Technology, Professor (Deputy Chairman); Ye. S. Shchetnikov, Doctor of Technical Sciences, Professor (Deputy Chairman); A. P. Vanichev, Doctor of Technical Sciences; V. V. Voyevodskiy, Corresponding Member, USSR Academy of Sciences; N. V. Golovanov, Candidate of Chemical Sciences; D. S. Zhuk, Candidate of Chemical Sciences; N. V. Inozemtsev, Doctor of Technical Sciences, Honored Worker in Science and Technical, Professor; B. V. Kantorovich, Doctor of Technical Sciences; S. M. Kogarko, Doctor of Chemical Sciences; B. P. Lebedev, Candidate of Technical Sciences; K. A. Nikitin, Candidate of Technical Sciences; A. S. Sokolik, Doctor of Chemical Sciences; and Ye. S. Golovina, Candidate of Technical Science (Scientific

Card 1/4

Kinetics and Propagation of Flame (Cont.)

SOV/2267

Secretary).

PURPOSE: This book is intended for engineers and specialists in thermal power production, gas combustion, heat engineering and related fields.

COVERAGE: The collection contains three articles which deal with the combustion reaction rate and flame velocity in gaseous mixtures and the influence of ozone on the kinetics of hydrocarbon combustion. References appear at the end of each article.

TABLE OF CONTENTS:

Tsukhanova, O. A. Calculation of Total Reaction Rate and Flame Velocity in Gaseous Mixtures 3

The author describes the combustion process with a system of differential equations of the conservation of mass, equations of momentum, energy, state and chemical kinetics. The article is subdivided as follows: Derivation of an approximation formula for normal flame velocity; Derivation of equations for calculating coefficients of total reaction rate; Calculation of total

Card 2/4

Kinetics and Propagation of Flame (Cont.)

SOV/2267

reaction kinetics for mixtures of carbon monoxide with oxygen and nitrogen; Comparison of experimental data with calculated values of the total reaction rate of carbon monoxide with oxygen; On the conformity of exact and approximate solutions. The following personalities are mentioned: N. N. Semenov, D. A. Frank-Kamenetskij, Ya. B. Zel'dovich, G. A. Barskiy, A. V. Bondarenko, N. A. Karzhvin, N. A. Karzhavina, L. S. Sclov'yeva, G. I. Kozlov, I. S. Bruk.

Kamentskaya, S. A., N. A. Slavinskaya, and S. Ya. Pshezhetskiy. Influence of Ozone on the Combustion of Hydrocarbons

33

The author investigated the influence of ozone on critical conditions for the combustion of mixtures of some hydrocarbons with oxygen. Butane, Butylene and cyclohexane were investigated as it was possible to assume substantial distinction in their primary interactions with ozone. The following personalities are mentioned: N. M. Chirkov, S. G. Entelis, A. B. Nalbandyan, B. Ya. Stern, N. A. Kleymanov, I. N. Antonova, A. M. Markevich.

Cherednichenko, V. M., I. N. Pospelova, and S. Ya. Pshezhetskiy, Influence of Ozone on the Burning Velocity of Hydrocarbons

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PSHEZHETSKIY, S.Ya.; KAMENETSKAYA, S.A.; GRIBOVA, Ye.I.; PANKRATOV, A.V.;
MOGOZOV, N.M.; POSPELOVA, I.N.; APIN, A.Ya.; SIHYATSKAYA, V.N.;
SLAVINSKAYA, N.A.; CHEREDMICHENKO, V.M.

Kinetics of the decomposition and explosion of ozone.
Probl.fiz.khim. no.2:27-38 '59. (MIRA 13:7)

1. Laboratoriya kinetiki gazovykh reaktsiy Nauchno-issledovatel'skogo fiziko-khimicheskogo instituta im. L.Ya.Karpova.
(Ozone) (Explosions)

L 26358-66 EWT(1)/EWT(m) JD

ACC NR: AP6013378

SOURCE CODE: UR/0195/66/007/002/0196/0201

B2
B3

AUTHOR: Pospelova, I. N.; Myasnikov, I. A.

ORG: Physicochemical Institute im. L. Ya. Karpov (Fiziko-khimicheskiy institut)

TITLE: Study of the recombination of hydrogen atoms by methods of calorimetry, diffusion, and semiconductor probes

SOURCE: Kinetika i kataliz, v. 7, no. 2, 1966, 196-201

TOPIC TAGS: hydrogen, atom recombination, recombination coefficient

ABSTRACT: The use of semiconductor films as probes in the determination of absolute coefficients of heterogeneous recombination of hydrogen atoms by Smith's diffusion method (W. V. Smith, J. Chem. Phys. 11, 110, 1943) is described. The results obtained are compared with measurements made by calorimetric and Wrede methods, of the relative concentrations of hydrogen atoms along the surface of a cylinder. Values of recombination coefficients of atomic hydrogen on glass (obtained by the method of semiconductor probes, calorimetry, and the Wrede diffusion method) are compared. The data show that the disappearance of free hydrogen atoms under the given conditions takes place at the walls of the vessel and on the surface of the film in conformity with the first-order law. The experimental part of the work was performed and evaluated in the laboratory of S. Ya. Pshezhetskiy, for which the authors thank the entire

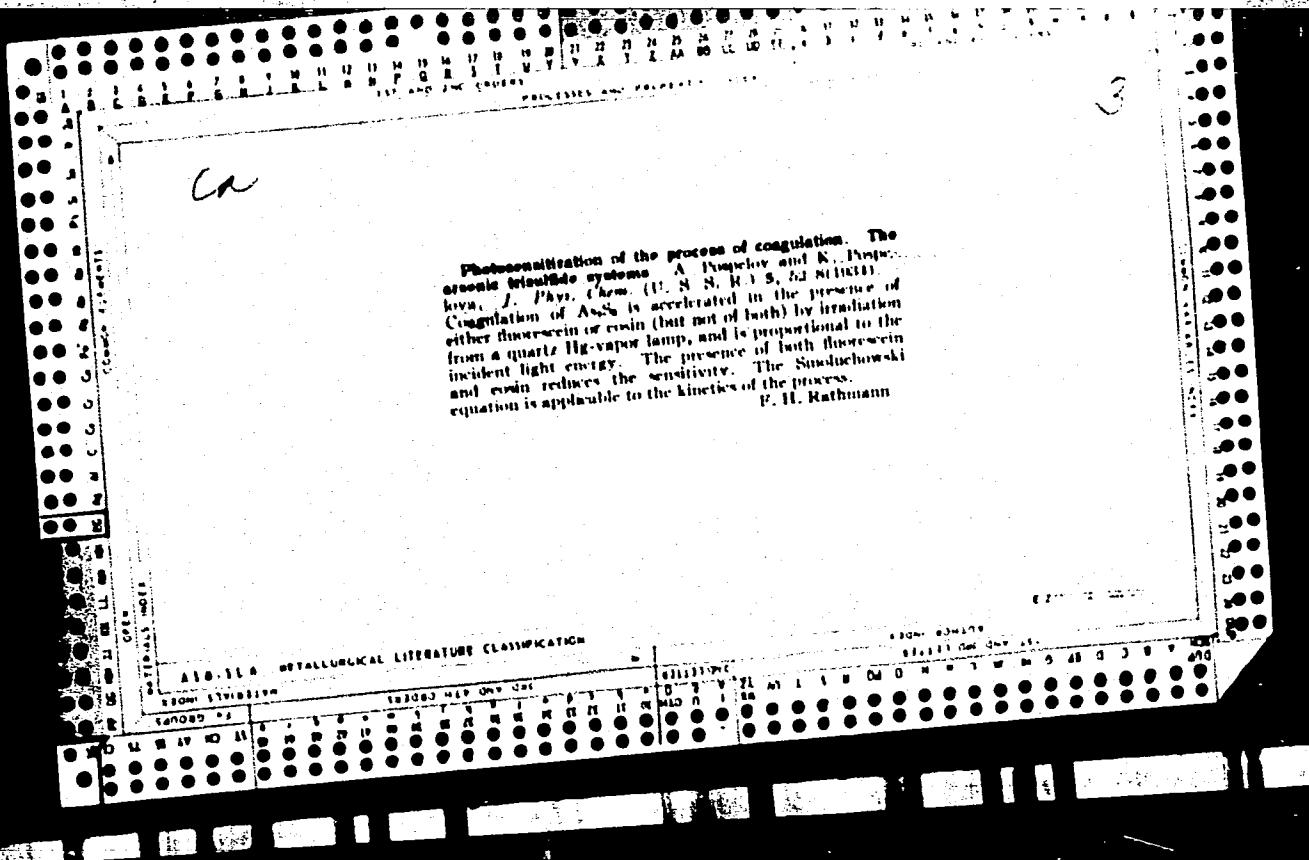
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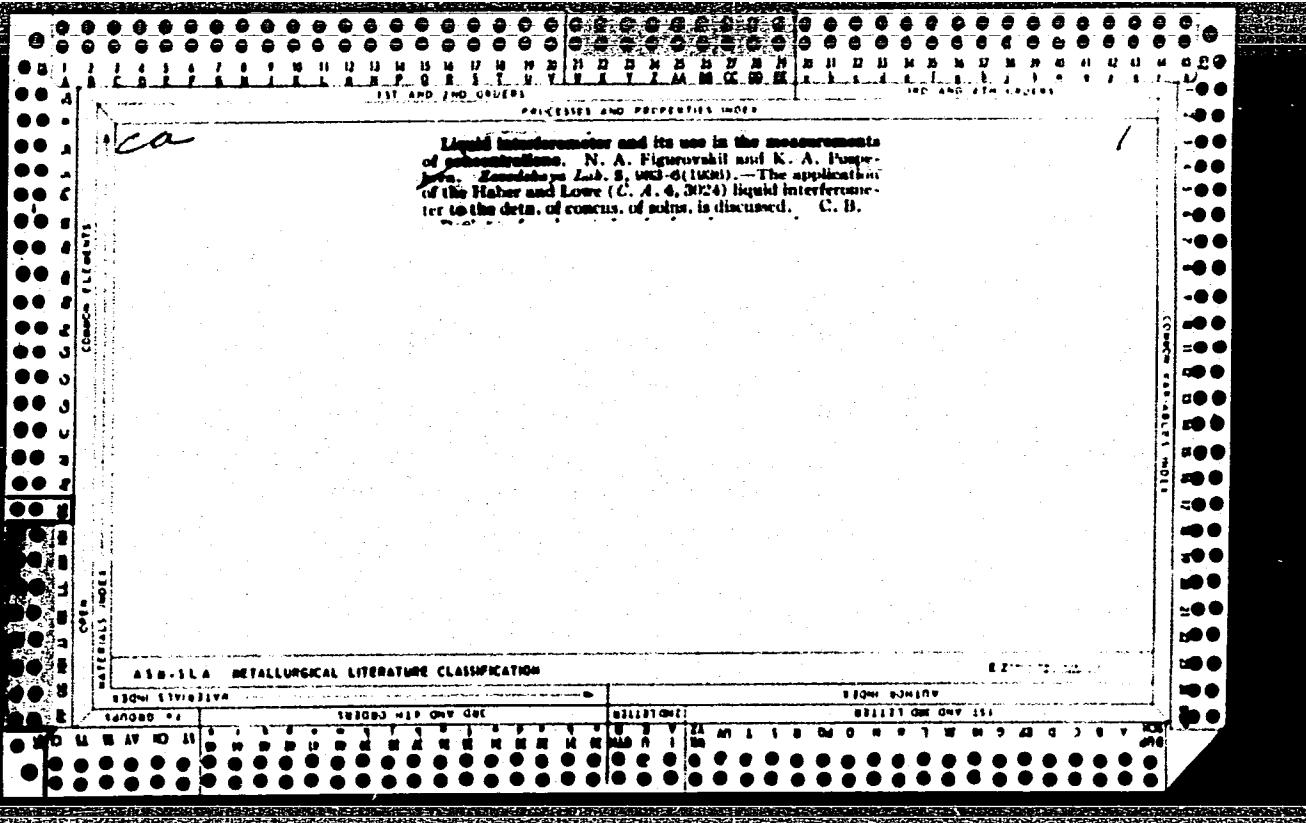
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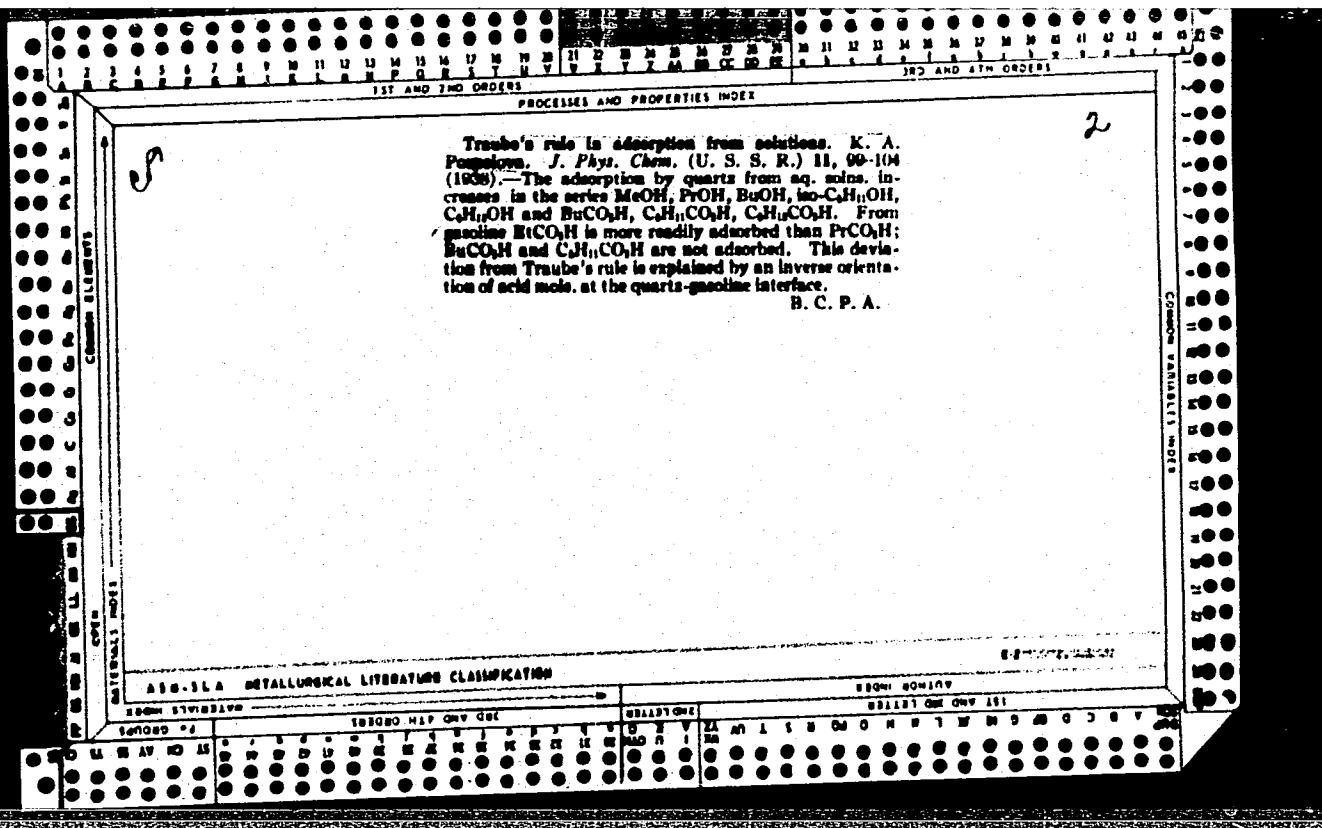
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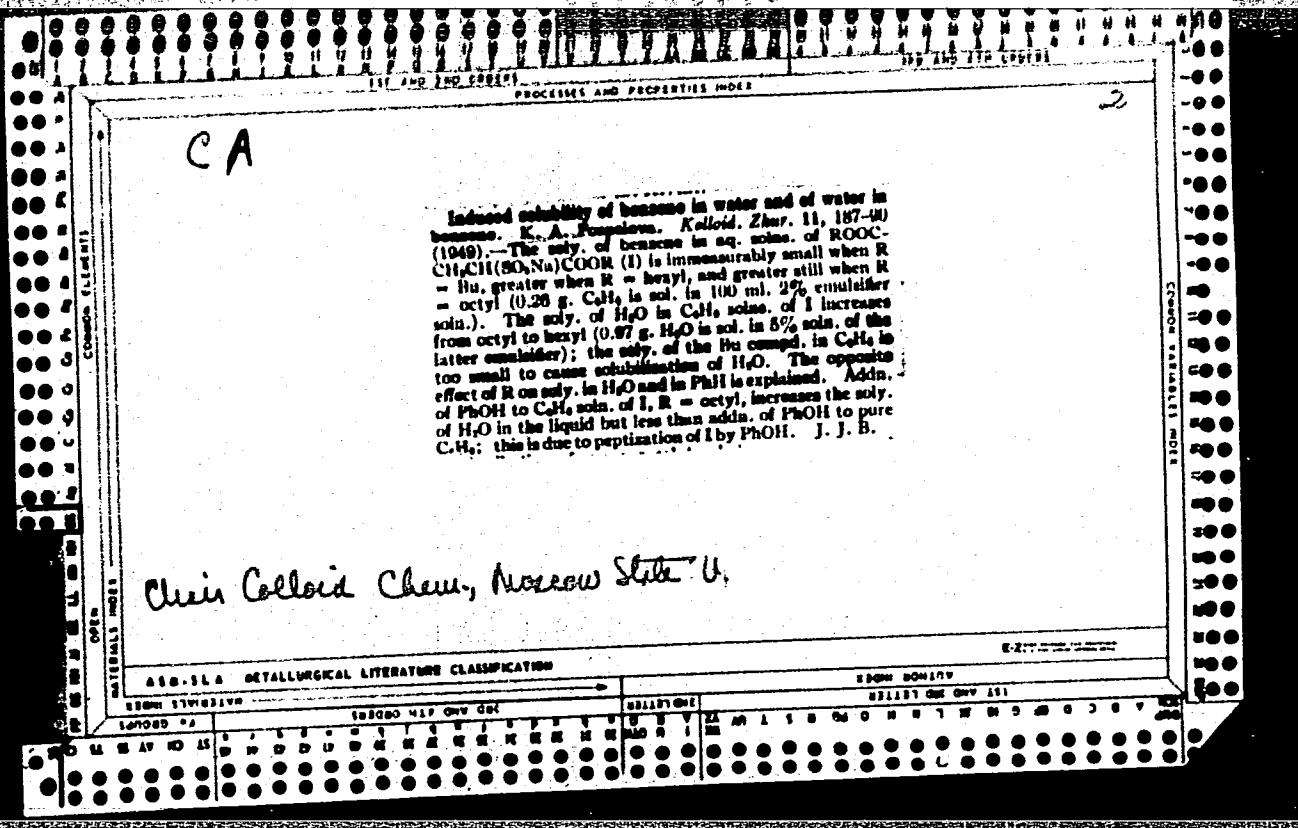




16.

Spontaneously forming emulsions. Mechanism of formation of soluble oils. Adsorption layers in disperse systems. K. Poppliger and P. Rehbinder (Acta Physicochim. U.R.S.S., 1942, 18, 71-87). Systems consisting of Na oleate or a naphthenic soap, a mineral oil, and a soap of a sulfonated castor oil are studied, and regions of stability for emulsions and sol. oils are plotted. Dispersity data are also recorded and discussed. Sol. oils are systems containing hydrocarbon sufficient only to build up a firmly-bound "superstructure" of molecules on the soap micelles; emulsion contain a larger quantity of hydrocarbon, the excess being held to the micelles by weak wetting forces. Transformation of a mineral oil-soap mixture into an emulsion occurs by a phase inversion process at a crit. $[H_2O]$. When an emulsion is diluted with H_2O the excess oil molecules become detached from the micelles and coalesce to droplets; the sol. oil formed simultaneously acting as an emulsifier. A. J. E. W.

Lab. Phys. Chem., Librakht Pedagogical State Inst, Moscow



PAS PER LIVRE K-4

USSR

Dependence of the colloidal solubility of some organic liquids on the concentration of the dissolving substance. Z. N. Markova, K. A. Presnolova, and P. A. Rebindor [State Univ., Moscow]. *Zhur. Fiz. Khim.* 16, 360-75 (1954).—Four methods for measuring solubilization (visual, nephelometric, refractometric, and depression of vapor pressure) gave results agreeing within $\pm 12\%$ for the uptake of C_4H_8 , octane (I), and CH_3CHCN (II) by a Na oleate (III) soln. Usually, the refractometric method gave the highest values, and the values were impossibly high when marked vol. changes occurred on mixing the detergent soln. (aliphatic Na sulfates) with "oils." The final uptake x (mol. of "oil" solubilized by one mol. of III) was achieved in 24 hrs. It increased with the concn. c of III, and dx/dc was greater at c above 90 g./l. than at c below 70 g./l. Apparently, the

micelles of III were different or differently connected with one another in these concn. ranges. The x was greater for polar compds. than for hydrocarbons. Thus, at $c = 90$, x at 20° was 2.65 and 0.43 for octanol and I, resp., and 10.8 and 1.7 for cyclohexanol and cyclohexane. However, x was 0.69 for $C_4H_8NO_2$ and 2.42 for C_4H_8 . II had $x = 2.82$, and $CH_3COCH_2CO_2Me$ 1.23. The x was smaller in K oleate solns. WS

J. J. Bikerman

Postranova, K. A.

Flocculation of bentonite suspensions to make sand impermeable to water. M. S. Postranova and Z. A. Ponomarova (M. V. Lomonosov State Univ., Moscow). *Doklady Akad. Nauk S.S.R.* 94, 1129-32 (1954).—The highly stable, thixotropic suspensions (with 3 to 5% solid material) of Oglaninsk Na bentonite are flocculated by dil. solns. of AlCl₃ (e.g., 0.0003% to 0.05 and 0.10% of the salt). The rate of filtration through the bentonite-treated sand corresponds to $\log v = a + \gamma \log t$, in which a is experimentally detd., γ is measured by the tan function of the slope angles for the parallel lines of the graph of this equation, v is vol. of filtrate, and t is time. To make sand less permeable to H₂O the highly dispersed bentonite suspension is impregnated completely into the loose sand, then the flocculating agent is added to ppt. the clay mineral particles on the surface of the sand grains. This effect is satisfactory only to a depth of about 5 cm. If the concns. (in g. equivalents) for the solns. of the chlorides of Na, K, Mg, Ca, Ba, and Al are plotted against the consts. a (detd. for a filtration time of 10 min.), the efficiencies of the flocculation of AlCl₃, MgCl₂, and NaCl are given by the ratio of the concns. 1:4:113. The lyotropic series Na⁺ < K⁺; Mg⁺⁺ < Ca⁺⁺ < Ba⁺⁺ is evidently valid. Additions of Na₂CO₃ more or less compen-

sate the flocculating effect of AlCl₃. By such mixed addns. the times of flocculation can be controlled. W. Eitel

Pospelova, K. A.

USSR/Chemistry - Physical chemistry

Card 1/1 Pub. 22 - 32/47

Authors : Markina, Z. N.; Pospelova, K. A.; and Rebinder, P. A., Academician

Title : Solubility of sodium oleate hydrosols in relation to their structure

Periodical : Dok. AN SSSR 99/1, 121-124, Nov 1, 1954

Abstract : The solubility of hydrosols was investigated in a wide range of concentrations of aqueous sodium-oleate solutions and compared with colloidal solubility. The structural-mechanical properties of a diluted sodium oleate solution were measured with an Ubelorde viscosimeter and the properties of highly concentrated solutions by means of a Shvedov device. The relation between colloidal solubility of certain organic liquids and the concentration of aqueous $\text{NaC}_{18}\text{H}_{33}\text{O}_2$ solutions was established. The deformation characteristics of the studied sodium oleate solutions were found to be closely related with their structural characteristics which determine the relation between colloidal solubility and concentration. Four references: 3-USSR and 1-French (1950-1952). Graphs.

Institution : The M. V. Lomonosov State University, Moscow

Submitted : July 26, 1954

Pospelova, A. I.)

REBINDER, P.A.; POSPELOVA, K.A.

Comments on E.M.Spivakova's paper "The mechanism of solubilization and the dependence of the solvent power of emulsifiers on their molecular nature." Koll. zhur.17 no.5:408 S-0 '55. (MIRA 9:1)
(Emulsions) (Spivakova, E.M.)

POSPELOVA, K. A., MARKINA, Z. N., and REBINDER, P. A.

"Colloid Solubility of Organic Liquids in Hydrosols of Surface Active Substances"
(Kolloidnaya rastvorimost' organicheskikh zhidkostey v gidrozolyekh poverkhnostno-aktivnykh veshchestv) from the Book Trudy of the Third All-Union Conference on Colloid Chemistry, pp 410-419, Iz. AS USSR, Moscow, 1956

(Report given at above meeting, Minsk, 21-4 Dec 53)

Rebinder: Academician

KRYLOVA, I.A.; GOSTEV, M.M.; KOVRIZHKO, L.F.; ZUBOV, P.I.; POSPELOVA,
K.A.; PASYNKOV, N.V.; SOTNIKOV, I.F.

Effect of surface-active agents on the strength characteristics
of the vulcanizates of carbon black extended SKA-30APK rubber.
Kauch. i rez. 24 no.12:13-14 '65. (MIRA 18:12)

1. Institut fizicheskoy khimii AN SSSR i Voronezhskiy zavod
sinteticheskogo kauchuka im. S.M. Kirova.

AVETISYAN, L.S.; POSPELOVA, K.A.; ZUBOV, P.I.

Properties of polymethacrylate latex films as dependent on the
molecular weight. Koll.zhur. 25 no.3:278-281 My-Je '63.

I. Institut fizicheskoy khimii AN SSSR, Moscow.

(MIRA 17:10)

ACCESSION NR: AP4011308

S/0069/64/026/001/0057/0060

AUTHORS: Kry*lova, I. A.; Pospelova, K. A.; Zubov, P. I.

TITLE: Stabilizing aqueous dispersions of carbon black with surface active agents

SOURCE: Kolloidny*y zhurnal, v. 26, no. 1, 1964, 57-60

TOPIC TAGS: carbon black, channel black, stabilized aqueous suspension, Leukanol stabilized carbon black, rubber filler, dispersion stabilization, specific surface, NAF carbon black, Ukhtin channel black

ABSTRACT: Aqueous suspensions of NAF carbon black and Ukhtin channel black stabilized by Leukanol and by the potassium soap of hydrogenated rosin were compared. The specific surface area of the stabilized aqueous carbon black is less than that of the channel black, indicating greater aggregation of the carbon black particles and more strongly coagulated structures. The lesser stability of the NAF carbon blacks apparently improves contact of these particles with latex globules, causing more effective reinforcing of rubbers in

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ACCESSION NR: AP4011308

latex.

"The authors thank N. N. Lezhnev under whose direction the carbon black analysis was conducted."

Orig. art. has: 4 Figures and 2 Tables.

ASSOCIATION: Institut fizicheskoy khimii AN SSSR Moskva (Institute of Physical Chemistry AN SSSR)

SUBMITTED: 28May63

DATE ACQ: 14Feb64

ENCL: 00

SUB CODE: MA

NR REF Sov: 004

OTHER: 001

2/2

Card

POSPELOVA, K.A., kand.khim.nauk

Problems of colloid chemistry. Vest. AN SSSR 32 no.11:136-138
N '62. (MIRA 15:11)
(Colloids)

S/069/63/025/002/002/010
A057/A126

AUTHORS: Avetisyan, I.S., Bakayeva, T.V., Pospelova, K.A.

TITLE: On the stabilization of polystyrene latex by non-ionogenic emulsifiers

PERIODICAL: Kolloidnyy zhurnal, v. 25, no. 2, 1963, 143 - 145

TEXT: The emulsion polymerization of styrene was carried out with a mixture of technical grade non-ionogenic emulsifiers OP-10 (OP-10) and xylital C-15 (S-15). The latter is a surface-active substance obtained from xylite by introducing a stearic-acid radical and 15 hydroxyethyl groups. OP-10 has a much higher activity than xylital S-15. Surface tension measurements were carried out and it was observed that near-to-equilibrium values might be obtained not only by the stalagmometer, but also by the du Nouy method. Purification of the surface-active substances by means of electrodialysis did not change considerably the surface activity but decreased the pH. Therefore, non-dialized aqueous solutions were used for the polymerization experiments. However, a stable emulsion of the monomer was obtained only with OP-10, while a block polystyrene re-

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On the stabilization of polystyrene latex

S/069/63/025/002/002/010
A057/A126

sulted from polymerization with xylital S-15. Thus polymerization was carried out with a mixture of xylital S-15: OP-10 = 4 : 1, styrene, and potassium per-sulfate. The mixture was initially heated to 80°C and by the exothermic reaction the temperature rose to 95°C. Polymerization was carried out under soft mixing for 3 h. The latex obtained showed high dispersity (r about 0.1μ), but pH = 4, apparently due to a partial saponification of xylital S-15. The dry residue of the latex was 31.4%, content of the monomer 2.8%. The latex showed high stability (without phase separation for 12 months) in storage. There is 1 figure.

ASSOCIATION: Institut fizicheskoy khimii AN SSSR, Moskva (Institute of Physical Chemistry of the AS USSR, Moscow)

SUBMITTED: October 9, 1961

Card 2/2

15.9130

41416

S/069/62/024/005/009/010
B117/B186

AUTHORS:

Pospelova, K. A., Vorob'yeva, T. A., Zubov, P. I.

TITLE:

Improvement of the antifreezing properties of synthetic latices and their oil-water emulsion models

PERIODICAL: Kolloidnyy zhurnal, v. 24, no. 5, 1962, 602-608

TEXT: Attempts were made to improve the antifreezing properties of CKC-65 (SKS-65) latex produced by the Voronezhskiy zavod SK (Voronezh Synthetic Rubber Plant) and of polystyrene latex synthesized in the laboratory of the Institut fizicheskoy khimii AN SSSR (Institute of Physical Chemistry AS USSR). It has been established that addition of emulsifiers alone does not make SKS-65 frostproof at -15°C and that irreversible coagulation (coalescence) takes place at this temperature. Such latex will, however, be completely frostproof at this temperature if aqueous solutions of acetamide, urea, some ammonium salts, or especially ammonia are added. The improvement is evidently related to the osmosis of sufficient quantities of a non-freezing liquid, as was observed by V. V. Vol'khin and V. L. Zolotavin in the case of iron hydroxide and

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PISARENKO, Aleksandr Pavlovich, prof.; POSPELOVA, Kseniya Aleksandrovna,
dots.; YAKOVLEV, Aleksandr Georgiyevich, dots.; VOYUTSKIY, S.S.,
prof., retsentent; NAZAROV, V.I., prof., retsentent; TAUEMAN, S.S.,
prof., retsentent; BARAMBOYM, N.K., prof., retsentent; STUKOVNIN,
I.D., red. izd-va; YEZHOOVA, L.L., tekhn. red.

[Course in colloid chemistry] Kurs kolloidnoi khimii. Moskva,
Gos.izd-vo "Vysshaia shkola," 1961. 241 p. (MIRA 14:12)
(Colloids)

FEDOTOVA, M.S., kand. khim. nauk; POSPELOVA, K.A., kand. khim. nauk

Determination of the dispersity of fillers with the aid of a
sedimentation meter designed by N.A. Figurovskii. Bum. prom.
34 no.11:11-12 N '59. (MIRA 13:3)

1. Moskovskiy filial TSentral'nogo nauchno-issledovatel'skogo instituta
tsellyuloznoy i bumazhnoy promyshlennosti.
(Paper) (Fillers) (Sedimentation analysis)

POSPEPELOVA, K. A.

[Redacted]
Coagulation of bentonite suspensions, used for decreasing the water-permeability of sand. M. S. Fedotova and K. A. Pospepelova (*Zh. Akad. Nauk SSSR*, 1854, 84, 1129-1132). To obtain uniform coagulation throughout the depth of a deep sand bed, a 1% bentonite suspension is made 0.01% in AlCl_3 and 0.25% in Na_2CO_3 , and is then filtered through the bed, followed by a 0.1% solution of AlO_4^- . About half the bentonite present is deposited in a 50-cm. bed.

R. C. Murray

Po-SPELOVA, N.A.

"S S R"

Dependence of the colloidal stability of some organic
liquids on the concentration of the dissolving substance.
Z. N. Markina, K. A. Ponchova, and P. A. Rebinder.
Colloid J. (U.S.S.R.) 16, 353-60 (1954) (Engl. translation).
See C.A. 49, 29184. H. L. H.

PL 62

ACC NR: AT6028809

(N)

SOURCE CODE: UR/3222/65/000/008/0103/0107

AUTHOR: Pospelova, K. M. (Aspirant)

ORG: none

TITLE: A study of wave damping action of a transparent wavebreaker with consideration of wave spectrum

SOURCE: Moscow. Gosudarstvennyy proyektno-konstruktorskiy i nauchno-issledovatel'skiy institut morskogo transporta. Trudy, no. 8(14), 1965. Volnovyye issledovaniya; inzhenernyye izyskaniya (Wave studies; engineering research), 103-107

TOPIC TAGS: ocean wave, spectrum analysis, ocean dynamics

ABSTRACT: The influence of spectral structure of the wave field on wave damping coefficients of a transparent wavebreaker is found. Damping factors for monochromatic waves treated as wave spectral components were found as functions of screen depth, wavelength, and direction of generated waves. The study was conducted in a pool 5x26 m large and 0.4 m deep; the experimental scale was 1:50; wavelengths of 60, 120, and 240 cm were used (corresponding to natural wavelengths of 30, 60, and 120 m). The directional spectrum had components of 0, ± 30 , and $\pm 60^\circ$. Damping depends, in addition to wavebreaker depth, on the incidence angle of the wavefront. Consideration of wave spectrum leads to corrections of damping factors obtained for single waves; this correction decreases with decreasing wavelength and increasing screen depth. Orig.

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